



AS-9

## TRANSMITTAL OF APPEAL BRIEF

Docket No.  
4140-0112PUS1

In re Application of: Gordon COOK et al.

Application No. 10/523,023-Conf. #7457	Filing Date November 7, 2005	Examiner M. A. Brown	Group Art Unit 3772
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Invention: AN INFLATABLE DEVICE FOR USE IN IMPULSE THERAPY

### TO THE COMMISSIONER OF PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal  
filed: May 31, 2007

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This sheet is submitted in duplicate.

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PATENT  
4140-0112PUS1

*IN THE U.S. PATENT AND TRADEMARK OFFICE*

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In re Patent Application of:  
Gordon COOK et al.

Application No.: 10/523,023

Confirmation No.: 7457

Filed: February 1, 2005

Art Unit: 3772

For: AN INFLATABLE DEVICE FOR USE IN  
IMPULSE THERAPY

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Examiner: Michael A. Brown

**BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37**

MS Appeal Brief - Patents  
Commissioner for Patents  
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Alexandria, VA 22313-1450

Sir:

This brief contains items under the following headings as required by 37 C.F.R. § 41.37  
and M.P.E.P. § 1205:

- I. Real Party In Interest
- II. Related Appeals and Interferences
- III. Status of Claims
- IV. Status of Amendments
- V. Summary of Claimed Subject Matter
- VI. Grounds of Rejection to be Reviewed on Appeal
- VII. Argument
- VIII. Claims Appendix
- IX. Evidence Appendix
- X. Related Proceedings Appendix

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**I. Real Party in Interest**

The real parties in interest for this Application are the named inventors, i.e., Gordon Cook and Graeme Follett. This Application has not been assigned.

**II. Related Appeals and Interferences**

To the best of Appellants' knowledge, there are no other prior or pending appeals of this Application, or patent interference proceedings, or judicial proceedings which may be related to, directly affect, or be directly affected by, or have a bearing on the Board's decision of this Appeal.

**III. Status of Claims**

In the Application on appeal, claims 1-3, 5-7 and 9-11 are the only pending claims, are under final rejection, and are on appeal. Claims 1, 7 and 10 are independent.

**IV. Status of Amendments**

The Amendment under 37 C.F.R. §1.111, filed on September 13, 2006, has been entered as a matter of right under 37 CFR §1.111, and sets forth the claims on appeal.

**V. Summary of the Claimed Subject Matter**

Claims 1, 7 and 10 are the three independent claims.

Claim 1 is directed to a device for use in applying impulse therapy to a limb of the human body, comprising an inflatable bladder, such as, for example, the pressure vessel or bladder 4

(disclosed, for example, on page 6, lines 20-24, and shown, for example, in Figs. 5-7, 9 and 13) having volume-reducing internal component means, for example, internal media 10, disclosed on page 6, lines 20-24 and shown, for example, in Figs. 5-13, for dissipating the flow of fluid into the bladder 4 with accompanying reduction in fluid flow rates and noise generated by the fluid flow during pressurization of the bladder 4 in a timed sequence of pressure hold and pressure release, as disclosed, for example, on page 3, lines 4-12, means for providing intermittent pulses of fluid to the bladder in accordance with the pre-determined timed sequence of pressure hold and pressure release, as disclosed, for example, on pages 3, lines 4-12, and means for securing the bladder around the limb of the human body to apply the bladder to the area to be treated, as shown, for example, in Figs. 7 and 8, and as disclosed, for example, on page 7, lines 16-18.

Claim 7 is directed to a device for use in applying impulse therapy to a limb of the human body comprising a flexible pad (disclosed, for example, on page 5, lines 14-16) having an inflatable interior (shown, for example, in Figs. 5-7, 10 and 13) filled or partially filled with a cellular component 10, disclosed, for example, on page 7, lines 8-14, and shown, for example, in Figs. 5-13, providing means for reducing fluid flow rates and noise during pulsed pressurization of said inflatable interior of the flexible pad, as disclosed on page 2, lines 20-24 and page 3, lines 1-12; means for providing intermittent impulses of fluid to the inflatable interior in accordance with a predetermined timed sequence of pressure hold and pressure release, as disclosed, for example, on pages 3, lines 4-12; and means for securing the flexible pad around the limb of the human body to apply the pad to the area to be treated, as shown, for example, in Figs. 7 and 8, and as disclosed, for example, on page 7, lines 16-18.

Claim 10 is directed to a device for use in applying impulse therapy to a limb of the human body comprising: a flexible pad (disclosed, for example, on page 5, lines 14-16) having an inflatable chamber (shown, for example, in Figs. 5-7, 10 and 13) having means for controlling fluid flow rates and noise level during pressurization of the inflatable chamber as disclosed on page 2, lines 20-24 and page 3, lines 1-12, by varying the internal volume of the inflatable chamber, as disclosed, for example, on page 6, lines 20-24; means for providing intermittent pulses of fluid to the inflatable chamber in accordance with a predetermined timed sequence of pressure hold and pressure release, as disclosed, for example, on pages 3, lines 4-12; and means for securing the flexible pad around the limb of the human body to apply the flexible pad to the area to be treated, as shown, for example, in Figs. 7 and 8, and as disclosed, for example, on page 7, lines 16-18.

**VI. Grounds of Rejection to be Reviewed on Appeal**

- A. Claims 1, 2, 7 and 9-10 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,496,262 to Johnson (“Johnson ‘262”).
- B. Claims 3 and 11 stand rejected under 35 USC §103(a) as being unpatentable over Johnson ‘262 in view of U.S. Patent 4,135,500 to Gorman.
- C. Claim 5 stands rejected under 35 USC §103(a) as being unpatentable over Johnson ‘262 in view of Johnson ‘262.
- D. Claim 6 stands rejected under 35 USC §103(a) as being unpatentable over “the references applied to claims above,” and further in view of U.S. Patent 5,353,525 to Grim.

## VII. Argument

A. Claims 1, 2, 7 and 9-10 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,496,262 to Johnson (“Johnson ‘262”).

During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). This burden can be satisfied when the PTO presents evidence, by means of some teaching, suggestion or inference either in the applied prior art or generally available knowledge, that would have appeared to have suggested the claimed subject matter to a person of ordinary skill in the art or would have motivated a person of ordinary skill in the art to combine the applied references in the proposed manner to arrive at the claimed invention. See Carella v. Starlight Archery Pro Line Co., 804 F.2d 135, 140, 231 USPQ 644, 647 (Fed. Cir. 1986); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); In re Rinehart, 531 F.2d 1048, 1051-1052, 189 USPQ 143, 147 (CCPA 1976).

If the PTO fails to meet this burden, then the applicant is entitled to the patent. However, when a *prima facie* case is made, the burden shifts to the applicant to come forward with evidence and/or argument supporting patentability. Patentability *vel non* is then determined on the entirety of the record, by a preponderance of evidence and weight of argument, *Id.*

A prior art reference anticipates the subject matter of a claim when that reference discloses every feature of the claimed invention, either explicitly or inherently. In re Schreiber,

128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed Cir. 1997). While, of course, it is possible that it is inherent in the operation of the prior art device that a particular element operates as theorized by the Examiner, inherency may not be established by probabilities or possibilities. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

Claim 1, as amended, recites a combination of features, including an inflatable bladder having volume-reducing internal component means for dissipating the flow of fluid into the bladder with accompanying reduction in fluid flow rates and noise generated by the fluid flow during pressurization of the bladder in a timed sequence of pressure hold and pressure release.

Johnson '262 does not disclose this claimed combination of features. While Johnson '262 does include two urethane foam layers 34, Johnson '262, in col. 2, lines 30-40, discloses those urethane foam layers in the context of U.S. Patent 4,628,945 ("Johnson '945"). Johnson '945 discloses urethane foam layers in the context of an inflatable device that is filled up with air by mouth (see the paragraph bridging cols. 2 and 3) and discloses that these layers are used as protective cushions to avoid discomfort to the wearer (see col. 4, lines 37-50).

There is no explicit disclosure in either Johnson '262 or Johnson '945 of an inflatable bladder having a volume-reducing internal component means for dissipating the flow of fluid into the bladder with accompanying reduction in fluid flow rates and noise generated by the fluid flow during pressurization of the bladder in a timed sequence of pressure hold and pressure release, as claimed.

Nor does the Office Action make out a *prima facie* case of inherent disclosure of the claimed invention. As pointed out in the case law cited above, for the Office to show inherent disclosure, what is inherent must not just possibly occur, and must not just probably occur, but must necessarily occur. The Office Action clearly provides no objective factual evidence that the layers 32 of urethane foam in Johnson '262 necessarily constitute volume-reducing internal component means for dissipating the flow of fluid into the bladder with accompanying reduction in fluid flow rates and noise generated by the fluid flow during pressurization of the bladder in a timed sequence of pressure hold and pressure release, as claimed, especially where the primary disclosed purpose of those urethane layers 32 is for the comfort of the wearer.

In response to these arguments, the final Office Action states starting on page 4, that “[T]he Examiner concurs that Johnson doesn’t disclose the (sic: that) a volume-reducing internal component is used for dissipating the flow of fluid into the bladder with accompanying reduction in fluid flow rates and noise generated by the fluid flow during pressurization of the bladder in a time sequence of pressure hold and pressure release.”

Appellants respectfully submit that this clear, unmistakable and unequivocal admission dooms the rejection and conclusively establishes that the final Office Action does not make out a *prima facie* case of anticipation of the claimed invention by Johnson '262.

The Office Action continues by asserting that “Johnson '262 does not have to disclose that the volume-reduction internal component is used to perform the same function as the volume-reduction internal component as disclosed in the present invention. Johnson '262 simply

has to disclose a volume-reduction internal component that is capable of performing the same function.”

Appellants respectfully disagree with this statement and note that the Office Action completely fails to cite any legal support for this assertion. In this regard, Appellants respectfully submit that all words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Moreover, Appellants respectfully submit that the Office Action fails to present any objective factual evidence that Johnson’s ‘262 device is even capable of performing the recited function. In this regard, Appellants’ device differs significantly from Johnson’s ‘262 device in that Johnson ‘262 employs four separate inflatable chambers 8, 9, 10 and 11 with a urethane foam layer in only two of these four chambers, i.e., in chambers 8 and 9. In Johnson ‘262, no urethane foam layer is provided in either inflatable chamber 10 or inflatable chamber 11.

Moreover, air is pumped into Johnson’s ‘262 device via coupling 4, which is in chamber 10, which does not contain a urethane foam layer. In other words, col. 5, lines 30-65 of Johnson ‘262 clearly indicates that the intermittent flow of pressurizing fluid is only fed to the two internal chambers 10 and 11 of bladder 6, neither of these chambers having a volume reducing component.

The internal foam components 34 in Johnson ‘262 are located in internal chambers 8 and 9, which are orally inflated through a self-sealing valve 9a (see col. 5, lines 37-38 of Johnson

‘262). However, chambers 8 and 9 are not fed with intermittently pulsed fluid from the air pump. This is a significant difference from the claimed invention.

Johnson’s ‘262 structure differs so substantially from that of Appellants that it is not reasonable to conclude that the urethane form layer structure disclosed by Johnson ‘262 would even be capable of dissipating the flow of fluid into its bladder with accompanying reduction in fluid flow rates and noise generated by the fluid flow during pressurization of the bladder in a timed sequence of pressure hold and pressure release, as claimed. In this regard, the Office Action never explains how Johnson’s urethane foam layers, which are not found in pump-inflatable chambers 10 and 11, i.e., are inflated by air pump 1 (col. 8, lines 40-53) dissipate the flow of fluid (air) into bladder chambers 10 and 11 with a reduction in fluid flow rates and noise generated by the fluid flow during pressurization of the bladder chambers 10 and 11 in a timed sequence of pressure hold and pressure release, as claimed.

In fact, the inclusion of foam material in Johnson ‘262 is never mentioned as being operatively coupled to Johnson’s ‘262 pulsed pressure chambers 10 and 11. The foam material in Johnson ‘262 appears to be used to merely provide a cushioning effect for the limb of a wearer when the device is in use. Certainly such a disclosure does not constitute objective factual evidence of Johnson’s ‘262 cushioning material 34 as being directed to reducing fluid flow rates and noise of pulsed air, especially when the cushioning material is not in contact with pulsed air.

Moreover, the real test of patentability is whether Johnson ‘262 discloses the claimed invention explicitly or inherently, i.e., necessarily, and Johnson ‘262 admittedly does not contain such a disclosure.

Even the assertion that Johnson '262 is capable of performing the claimed invention is based solely on speculation, and not objective factual evidence, as required by the aforementioned case law, and does not seem to be credible in view of the fact that Johnson's urethane foam layers are not positioned so as to be subjected to the air flow from pump 1.

With respect to independent claim 7, this claim positively recites a combination of features including a flexible pad having an inflatable interior filled or partially filled with a cellular component providing means for reducing fluid flow rates and noise during pulsed pressurization of said inflatable interior of the flexible pad.

Appellants respectfully submit that the arguments presented above directed to the subject matter of claim 1 apply equally to claim 7, there being no explicit or inherent disclosure in Johnson '262 of a flexible pad having an inflatable interior filled or partially filled with a cellular component providing means for reducing fluid flow rates and noise during pulsed pressurization of said inflatable interior of the flexible pad. The concept of using such a pad for reducing fluid flow rates and noise reduction during in a timed sequence of pressure hold and pressure release regarding the inflatable interior of the flexible pad is completely absent from Johnson '262.

With respect to independent claim 10, this claim positively recites a combination of features including a flexible pad having an inflatable chamber having means for controlling fluid flow rates and noise level during pressurization of the inflatable chamber by varying the internal volume of the inflatable chamber.

Appellants respectfully submit that the arguments presented above directed to the subject matter of claim 1 apply equally to claim 10, there being no explicit or inherent disclosure in

Johnson '262 of a flexible pad having an inflatable chamber having means for controlling fluid flow rates and noise during pressurization of the inflatable chamber by varying the internal volume of the inflatable chamber. The concept of using such a pad for reducing fluid flow rates and noise reduction during pressurization which is applied in a timed sequence of pressure hold and pressure release is completely absent from Johnson '262, both explicitly and inherently (i.e., necessarily).

Accordingly, the Office Action fails to make out a *prima facie* case of anticipation of the invention recited in claims 1-2, 7 and 9-10.

Reversal of this rejection of claims 1-2, 7 and 9-10 is respectfully requested.

B. Claims 3 and 11 stand rejected under 35 USC §103(a) as being unpatentable over Johnson '262 in view of U.S. Patent 4,135,500 to Gorman.

In rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention.

Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v.

F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 The Examiner may not pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve Inc., 796 F.2d 443, 448, 230 USPQ 416, 419 (Fed. Cir. 1986), cert. denied, 484 U.S. 823 (1987) and In re Kamm, 452 F.2d 1052, 1057, 172 USPQ 298, 301-2 (CCPA 1972), and obviousness cannot be established by locating references which describe various aspects of Appellants' invention without also providing evidence of the motivating force which would impel one skilled in the art to do what Appellants have done. Ex parte Levengood, 28 USPQ2d 1300, 1302 (Bd. App. & Int. 1993). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. These showings must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999). Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations

must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Moreover, a factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Appellants respectfully submit that Johnson '262 does not anticipate the subject matter of claim 1 from which claim 3 depends, or claim 10 from which claim 11 depends, for reasons discussed above, so even if it one of ordinary skill in the art were properly motivated to modify Johnson '262 in view of Gorran (which is not the case for reasons explained, below), as suggested, the resulting modified version of Johnson '262 would not suggest or render obvious the claimed invention.

Moreover, the Office Action fails to provide any objective factual evidence that one of ordinary skill in the art would be properly motivated to turn to Gorran to modify Johnson '262 for a number of reasons.

Firstly, Johnson '262 and Gorran are quite different and are not concerned with solving the same problem. Johnson '262 is concerned with an intermittently pressurized multicomponent cuff for therapeutic treatment of human body parts, where the cuff includes urethane layers inside the cuff for comfort of a wearer of the therapeutic cuff, whereas Gorran is concerned with an air mattress flotation support system 10 that rests on, not inside of, an air bladder, and is raised up and down by the air in the air bladder.

Secondly, the Office Action fails to provide objective factual evidence that replacing urethane foam layers 34 by a gel inside of the Johnson ‘262 cuff will achieve the patient cushioning and compression provided by a urethane foam layer, especially because the gel in Gorran is freely dispersible throughout the element 10 of Gorran.

In response to these arguments, the final Office Action argues that “the gel and the foam are equivalent when it comes to reducing the internal volume of an inflatable bladder.” In response, Appellants respectfully submit that just because something is an equivalent, does not mean that one of ordinary skill in the art would be properly motivated to turn to Gorran to modify Johnson ‘262, especially here, where Johnson ‘262 and Gorran are quite different structurally and are not concerned with solving the same problem. Johnson ‘262 is concerned with an intermittently pressurized multicomponent cuff for therapeutic treatment of human body parts, where the cuff includes urethane layers inside the cuff for comfort of a wearer of the therapeutic cuff, whereas Gorran is concerned with an air mattress flotation support system 10 that rests on, not inside of, an air bladder, and is raised up and down by the air in the air bladder.

Moreover, the test set forth in this rejection to support obviousness, i.e., “the gel and the foam are equivalents,” is not a proper test for obviousness, but is part of a doctrine of equivalents test used to show infringement of a patent claim, and is known as the “function, way, result” test. See, in this regard, for example, Network Commerce, Inc. v. Microsoft Corp., 76 USPQ2d 1330 (Fed. Cir. 2005). Just because something is a functional equivalent does not mean that it is an obvious equivalent, especially when what is at issue is the claimed combination, of features that neither reference alone suggests. Further, in this regard, Applicants respectfully note that two

equivalent structures that are used to stop motor vehicles are drum brakes and disc brakes. However, Applicants respectfully submit that disc brakes are not obvious in view of drum brakes.

Additionally, neither reference discloses reducing noise during pulsed/intermittent inflation of a bladder using the claimed volume-reducing internal component means for dissipating the flow of fluid into the bladder. In this sense they both differ from the claimed invention.

The Office Action also states that any object that is soft could be substituted for the gel or foam in order to occupy space inside the bladder. However, the claimed invention is not limited to any object that can fit inside of a bladder and take up space.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the invention recited in claims 3 and 11.

Reversal of this rejection of claims 3 and 11 is respectfully requested.

C. Claim 5 stands rejected under 35 USC § 103(a) as being unpatentable over Johnson '262 in view of Johnson '262.

Initially, Applicants note that this rejection is unclear to the point that it is not capable of being understood. The statement of the rejection is based on a base reference in view of a secondary reference, but identifies the same reference as the base reference and the secondary reference. Moreover, the body of the rejection does not further clarify the basis for the rejection,

either, as it merely discusses “Johnson ‘262.” As such, the rejection is flawed and must be withdrawn.

Clarification was respectfully requested of the Examiner.

In response to this request for clarification, the final Office Action simply repeated the rejection, only identifying Fig. 3 as “a different embodiment.” Unfortunately, this rejection is still not clear because (1) the first embodiment is said to be “figures 1-6” and the second embodiment is said to be “figure 3,” which is part and parcel of figures 1-6. Moreover, element 10 is clearly shown in Figures 2, 3, 5 and 6.

In other words, Applicants respectfully submit that the final Office Action still does not explain how Figure 3 differs from itself and all other figures, and what aspect of the other figures is supposed to be modified by Figure 3.

Also, the final Office Action still fails to provide objective factual evidence of proper motivation for one of ordinary skill in the art to modify the primary reference (Figures 1-6) in view of the secondary reference (Figure 3). The alleged reason why a skilled worker would be motivated to modify Figures 1-6 in Johnson ‘262 is “because either internal component could be used to reduce volume within the inflatable bladder.” Unfortunately, this is just a statement of what could happen and fails to address motivation for making it happen.

Another way of responding to this rejection is to state that Johnson ‘262 discloses two embodiments, each having a plurality of inflatable bladders. The preferred embodiment, shown in Figures 2 and 3, has three inflatable bladders, 9, 10 and 11. The second embodiment, shown in Figures 5 and 6 has four inflatable bladders, 9, 10, 10a and 11. Neither of these embodiments

is said to have a bladder with a foam attached to a wall of a bladder. All that is stated is that sealed chamber 8 of Figure 3 enclosed within chamber 9 has a layer of urethane foam 34 therein, and that another layer of urethane foam is placed in chamber 9 between the chamber 8 and the chamber 11. So, Johnson '262 clearly does not disclose a layer of foam attached to a bladder wall, as claimed. Because of this, no matter how Johnson's '262 embodiments are modified in view of one another, they cannot render the claimed invention obvious.

The Office Action also concludes that either component (without identifying both components) could be used to reduce volume in an inflatable bladder. Unfortunately, this statement does not explain why one of ordinary skill in the art would want to arrive at the claimed invention, and does not result in, or render obvious, the claimed invention, which requires far more than simply reducing the volume in an inflatable bladder.

Furthermore, as discussed above, all of Johnson's '262 embodiments are totally devoid of disclosing the inclusion of foam material as being operatively coupled to Johnson's '262 pulsed pressure chambers, and the only use of cushioning material 34 does not constitute objective factual evidence of Johnson's '262 cushioning material 34 as being directed to reducing fluid flow rates and noise of pulsed air that is not in contact with that cushioning material 34.

Under the circumstances, Applicants respectfully submit that the Office Action fails to make out a *prima facie* case of obviousness of claims 4-5.

Reversal of this rejection of claims 4-5 are respectfully requested.

D. Claim 6 stands rejected under 35 USC § 103(a) as being unpatentable over “the references applied to claims above,” and further in view of U.S. Patent 5,353,525 to Grim.

Because claim 6 depends from claim 5 and because the rejection of claim 5 is so unclear that it is also not capable of being understood, this rejection is also not capable of being understood. As such, the rejection is fatally flawed and must be withdrawn.

Clarification was respectfully requested of the Examiner.

Turning to the merits of the rejection, Applicants respectfully incorporate herein the reasons from the traversal of the aforementioned rejection of claims 4 and 5, above.

Furthermore, the Office Action fails to provide any objective factual evidence that one of ordinary skill in the art would be properly motivated to turn to Grim to modify the only identified single one of two references on which this rejection is based, because Johnson ‘262 and Grim are so different (a rapidly constantly inflated and deflated therapeutic cuff and an infrequently inflatable shoe) and are not concerned with solving the same problem. Johnson ‘262 is concerned with an intermittently pressurized multicomponent cuff for therapeutic treatment of human body parts, where the cuff includes urethane layers inside the cuff for comfort of a wearer of the therapeutic cuff, whereas Grim is concerned with an athletic shoe that does simply not have the intermittent pressurization and de-pressurization aspect Johnson ‘262.

Instead of responding to the merits of this argument, the final Office Action sidestepped it by stating that “Grim was used as a modifier to provide a teaching of having channels in a foam pad.” The problem with this response is that it evidences the fact that this rejection merely picks and chooses different pieces of different references and combines them without any

objective factual evidence of proper motivation to do so, and, instead, using only Applicants' disclosure as a blueprint to do so, which is evidence that this rejection is based solely on improper hindsight reconstruction of the claimed invention. One "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1780, 1783 (Fed. Cir. 1988). Case law makes clear that the best defense against hindsight-based obviousness analysis is the rigorous application of the requirement for a showing of a teaching or motivation to combine the prior art references, or some basis for predicting the claimed invention based on the applied art. Furthermore, Appellants respectfully submit that one of ordinary skill in the art would have no incentive to include a foam material, grooved or not, in Johnson's '262 intermittently pulsed bladders because Johnson '262 clearly does not disclose such a feature.

Under the circumstances, Applicants respectfully submit that the Office Action fails to make out a *prima facie* case of obviousness of claim 6.

Reversal of this rejection of claim 6 are respectfully requested.

**CONCLUSION**

Appellants respectfully submit that claims 1-3, 5-7 and 9-11 are patentable over the applied art and that all of the rejections and objections of record should be reversed.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

Dated: August 31, 2007

Respectfully submitted,

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## **CLAIMS APPENDIX**

1. (Previously Presented) A device for use in applying impulse therapy to a limb of the human body comprising:

an inflatable bladder having volume-reducing internal component means for dissipating the flow of fluid into the bladder with accompanying reduction in fluid flow rates and noise generated by the fluid flow during pressurization of the bladder in a timed sequence of pressure hold and pressure release;

means for providing intermittent pulses of fluid to the bladder in accordance with the pre-determined timed sequence of pressure hold and pressure release; and

means for securing the bladder around the limb of the human body to apply the bladder to the area to be treated.

2. (Previously Presented) The device as claimed in claim 1, wherein the internal component is of foam material.

3. (Previously Presented) The device as claimed in claim 1, wherein the internal component is a gel.

4. (Canceled)

5. (Previously Presented) The device as claimed in claim 2, wherein the foam is attached to one or both walls of the bladder.

6. (Previously Presented) The device as claimed claim 5, wherein the foam is provided with air flow channels.

7. (Previously Presented) A device for use in applying impulse therapy to a limb of the human body comprising:

a flexible pad having an inflatable interior filled or partially filled with a cellular component providing means for reducing fluid flow rates and noise during pulsed pressurization of said inflatable interior of the flexible pad;

means for providing intermittent impulses of fluid to the inflatable interior in accordance with a predetermined timed sequence of pressure hold and pressure release; and

means for securing the flexible pad around the limb of the human body to apply the pad to the area to be treated.

8. (Canceled)

9. (Previously Presented) The device as claimed in claim 7, when the cellular component is a foam material.

10. (Previously Presented) A device for use in applying impulse therapy to a limb of the human body comprising:

a flexible pad having an inflatable chamber having means for controlling fluid flow rates and noise level during pressurization of the inflatable chamber by varying the internal volume of the inflatable chamber;

means for providing intermittent pulses of fluid to the inflatable chamber in accordance with a predetermined timed sequence of pressure hold and pressure release; and

means for securing the flexible pad around the limb of the human body to apply the flexible pad to the area to be treated.

11. (Previously Presented) The device as claimed in claim 10, wherein said means for controlling fluid flow rates and noise level during pressurization of the inflatable chamber by varying the internal volume of the inflatable chamber is a gel or liquid.

12. (Canceled)

**IX EVIDENCE APPENDIX**

(None) - No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the Examiner is being submitted.

**X. RELATED PROCEEDINGS APPENDIX**

(None) - No related proceedings are referenced in Section II, above.